

# SEARCH FOR PAINTED BUTTON-QUAIL ON NORTH AND EAST WALLABI ISLANDS

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## Introduction and Methods

The threatened Houtman Abroholos sub-species of the Painted Button-quail (*Turnix varians scintillans*) occurs naturally only in the northern (Wallabi) group of the Houtman Abroholos Islands, Western Australia, including East Wallabi and North Islands. The Tammam Wallaby (*Macropus eugenii*) occurs naturally on East Wallabi Island but has been introduced to North Island in the recent past. The Tammams have thrived on North Island and become very abundant, much more than on East Wallabi Island. There are concerns that the habitat changes being wrought by the wallabies on North Island are having an adverse effect on the Painted Button-quail, and anecdotal reports have suggested that it is now either gone from the island or is very rare.

At the request of the Department of Environment and Conservation (DEC), Midwest Region, the above-named spent seven hours between 0700 and 1630 on each of North Island (24/10/06) and East Wallabi Island (25/10/06) searching for Painted Button-quails and signs of their presence. We covered as much area as possible, walking at spacing between about 25 and 100 metres, across potential buttonquail habitat. The emphasis was on attempting to identify flushed birds and scanning the ground around and under vegetation for the characteristic 'platelets' left by their foraging activities. In addition, a taped recording of the calls of the species was broadcast in promising habitat four times on each island. DEC provided a long rope in case we felt that dragging through the vegetation may have been a useful way to disturb button-quail. However, on the islands we concluded that in the places where button-quail were most likely the dragging of a rope through thick and very 'twiggy' vegetation would have been extremely difficult and impossible without doing much damage to that vegetation. We also recorded observations of Brush Bronzings, a species at the far northern end of its range on these islands.

## Results (see Table 1)

### *North Island:*

Two quail like birds were flushed, one of which was definitely a female Painted Button-quail and the other was indeterminate (that is, it was a fleeting sighting, appeared paler than a Painted Button-quail and could have been a Stubble Quail). Only two possible examples of fairly old button quail platelets were seen (Figure 1), both near an area where the definite identification of a flushed bird was made. This area was towards the far western side of the island which showed relatively low impact from Tammam Wallabies. No calls of Painted Button-quail were heard, either unprompted or in response to the broadcast of their call. Much of the island's denser vegetation was obviously affected by the grazing and movement of Tammam Wallabies, especially in the south-eastern part of the island, with little low ground cover or accumulations of litter. Brush Bronzings were reasonably common.



Figure 1 Possible button-quail platelet on North Island (photo Pam Agar)

Significantly, vegetation in the area around which the sighting was made and the platelet was seen was relatively little disturbed by Tammar Wallabies (Figure 2). Elsewhere on the island Tammars were abundant (50 to 100 seen) and the ground layer, including plant litter, heavily disturbed.

#### Summary of observations from each of E Wallabi and North Islands

| Observations           | North Island              | East Wallabi Island                         |
|------------------------|---------------------------|---|
| PBQs seen              | 1                         | 2   |
| Platelets              | 1 or 2                    | More than 20 sets, over 50 actual platelets |
| Tammars                | 50 - 100                  | <10   |
| Vegetation condition   | Poor over >half of island | Good throughout                             |
| Brush Bronzewings seen | About ten                 | About 20                                    |



Figure 2 Vegetation near sighting of button-quail on North Island (photo Pam Agar)

*East Wallabi Island:*

Two definite sightings of flushed Painted Button-quails were made and numerous examples of button-quail platelets were seen (Figure 3), often in patches of litter under low branches where up to ten platelets were close together. No calls of Painted Button-quail were heard, either unprompted or in response to the broadcast of their call. About ten wallabies were seen and the vegetation was much less disturbed than that on North Island. Brush Bronzewings appeared to be rather more common than on North Island.





Figure 3 Recent button-quail platelet on East Wallabi Island (photo Pam Agar)

## Discussion

Our results show that the Houtman Abroholos Painted Button-quail still occurs on North Island, but is probably more common on East Wallabi Island. Although there were only two definite sightings on East Wallabi Island and one on North Island, the Painted Button-quail is at most times a secretive bird and actual sightings are rare events for most birdwatchers - actually finding enough birds to make a meaningful comparison of populations between the two islands was always going to be unlikely. However, the much more frequent sighting on East Wallabi Island of the characteristic 'platelets' left by their foraging activity suggested a significantly larger population of button-quails there than on North Island. This was consistent with the apparently better condition of the denser vegetation, especially in the ground-layer, on East Wallabi Island. Although Brush Bronzings were moderately common on North Island they seemed to be more so on East Wallabi, again consistent with some adverse effect upon them of vegetation change due to the Tammar Wallabies.

While these results are by not means conclusive, our brief survey suggests that there is a healthier population of Houtman Abrolhos Painted Button-quail on East Wallabi Island than on North Island, and that the species is quite rare on the latter. Visual inspection suggests that the changes brought about by large numbers of Tammars on North Island has altered the low vegetation and disturbed accumulations of leaf litter in ways adversely affecting the button-quails.

## **Acknowledgements**

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## **Appendix 1 Birds seen on North Island 24/10/2006**

Stubble Quail (*Coturnix pectoralis*) probable sighting  
Eastern Reef Egret (*Egretta sacra*) dark morph  
Osprey (*Pandion haliaetus*)  
Nankeen Kestrel (*Falco cenchroides*)  
Houtman Abroholos Painted Button-quail (*Turnix varia scintillans*)  
Ruddy Turnstone (*Arenaria interpres*)  
Bar-tailed Godwit (*Limosa limosa*)  
Common Greenshank (*Tringa nebula*)  
Red-necked Stint (*Calidris ruficollis*)  
Pied Oystercatcher (*Haematopus longirostris*)  
Sooty Oystercatcher (*Haematopus fuliginosus*)  
Red-capped Plover (*Charadrius ruficappillus*)  
Greater Sand Plover (*Charadrius leschenaultii*)  
Pacific Gull (*Larus pacificus*)  
Silver Gull (*Larus novaehollandiae*)  
Crested Tern (*Sterna bergii*)  
Caspian Tern (*Sterna caspia*)  
Roseate Tern (*Sterna dougallii*)  
Fairy Tern (*Sterna nereis*)  
Brush Bronzewing (*Phaps elegans*)  
Richards Pipit (*Anthus novaehollandiae*)  
Welcome Swallow (*Hirundo neoxena*)  
Silvereye (*Zosterops lateralis*)

## **Appendix 2 Birds seen on East Wallabi Island 25/10/2006**

Wedge-tailed Shearwater (*Puffinus pacificus*)  
Pied Cormorant (*Phalacrocorax varius*)  
Eastern Reef Egret (*Egretta sacra*) dark morph  
Osprey (*Pandion haliaetus*) (feeding chick)  
White-bellied Sea-Eagle (*Haliaeetus leucogaster*) (feeding chick)  
Houtman Abroholos Painted Button-quail (*Turnix varia scintillans*)  
Ruddy Turnstone (*Arenaria interpres*)  
Bar-tailed Godwit (*Limosa limosa*)  
Common Sandpiper (*Actitis Hypoleucos*)  
Red-necked Stint (*Calidris ruficollis*)  
Pied Oystercatcher (*Haematopus longirostris*)  
Red-capped Plover (*Charadrius ruficappillus*)  
Greater Sand Plover (*Charadrius leschenaultii*)  
Pacific Gull (*Larus pacificus*)  
Silver Gull (*Larus novaehollandiae*)  
Crested Tern (*Sterna bergii*)  
Caspian Tern (*Sterna caspia*)  
Fairy Tern (*Sterna nereis*)  
Brush Bronzewing (*Phaps elegans*)  
White-browed Scrubwren (*Sereornis frontalis*)  
Welcome Swallow (*Hirundo neoxena*)  
Silvereye (*Zosterops lateralis*)